POSVYANSKIY, Aleksandr Davydovich; FEDOTOV, G.I., nauchn. red.; BOCHAROVA, Yu.F., red.

[Brief course in descriptive geometry] Kratkii kurs nachertatel'noi geometrii. Izd.2., perer. Moskva, Vysshaia shkola, 1965. 236 p. (MIRA 18:4)

KUROCHKIN, K.T.; BAUM, B.A.; FEDOTOV, G.K.; LIRMAN, A.M.; ROSHCHEKTAYEV, V.I.

Hydrogen in acid steel made from a liquid semifinished product.
Trudy Ural. politekh. inst. no.116:65-75 '61. (MIRA 16:6)
(Steel—Metallurgy) (Steel—Hydrogen content)

FELOTOV, G. M., KOMAR, E. G., MONOSZON, N. A., STREITSOV, N. S.

"Some Structural Features of the 10 GeV Synchrontron Electromagnet," paper presented at CERN Symposium, 1956, appearing in Nuclear Instruments, No. 1, pp. 21-30, 1957

40737

S/120/62/000/004/002/047
E032/E514

24.6730

AUTHORS: Strel'tsov, N.S., Fedotov, G.M., Rozhdestvenskiy, B.V., Gustov, G.K., Gamulina, V.Ye., Nifontov, Yu.L., Indyukov, N.N., Bezgachev, Ye.A. and Kuryshev, V.S.

TITLE: The construction of the electromagnet for the 7 GeV proton synchrotron

PERIODICAL: Pribory i tekhnika eksperimenta, no.4, 1962, 15-19

TEXT: A description is given (including sectional drawings) of the electromagnet. The electromagnet incorporates four types of magnetic sections, namely: 1) bending sections for radial focusing (total number 42), 2) bending sections for radial defocusing (total number 53), 3) bending sections for radial defocusing, located at points of beam extraction (total number 3), and 4) quadrupole lenses with zero field on the orbit (total number 14). The magnetic circuits of all the sections are assembled from insulated steel sheets (the chemical composition of the steel is similar to 32 (E2) steel). The hyperbolic pole faces were made on a special milling machine and have a curvature of 2780 cm in the horizontal plane. The system used to retain the

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steel sheets in position was such that the deformation of the hyperbolic face was ±(0.1-0.15)mm after two days and ±0.03 mm after two months. The design of the neutral pole faces of the bending magnets was such that their deformation and the electrodynamic stresses did not exceed 0.05 mm. The main winding consists of 48 turns connected in series and arranged in ter sections. The winding is made of rectangular copper piping which was manufactured by the Leningrad factory "Krasnyy Vyborzhets". In addition to the main winding, there are three compensating coils which are used to correct the magnetic field. Water cooling is used and the insulation is sufficient to withstand 2 kV. The extracting magnets, which are used to extract the beam into the experimental area, consist of a main coil (8 turns; copper piping) and two compensating coils (8 turns each; copper piping). Finally, the quadrupole lenses carry an 18 turn main winding and an 18 turn auxiliary winding, both in the form of copper piping. In order to facilitate the positioning of all the electromagnets, each of them carried special markers which were used to relate their position to the appropriate points

on the basic geodesic grid. Special mechanisms were used to adjust the magnets. They can be adjusted by ±2 cm in the vertical plane to an accuracy of 0.001 cm and by ±8.5 cm in the radial direction to an accuracy of 0.002 cm. The former adjustment is made with the aid of special wedges and the latter by a screw-driven mechanism. The azimuthal adjustment is made by simple wedge devices and can be achieved to an accuracy of ±0.05 cm. There are 6 figures.

ASSOCIATIONS: Nauchno-issledovatel'skiy institut elektrofizicheskoy apparatury GKAE
(Scientific Research Institute of Electrophysical Apparatus GKAE) and
Institut teoreticheskoy i eksperimental'noy fiziki GKAE (Institute of Theoretical and Experimental Physics GKAE)

SUBMITTED: April 6, 1962

STREL'TSOV, N.S.; FEDOTOV, G.M.; ROZHDESTVENSKIY, B.V.; GUSTOV, G.K.; GAMULINA, V.Ye.; NIFONTOV, Yu.L.; LUDYUKOV, N.N.; BEZGACHEV, Ye.A.; KURYSHEV, V.S.

Design of the electromagnet of the 7 bev. proton synchrotron. Prib. i tekh. eksp. 7 no.4:15-19 Jl-Ag '62. (MIRA 16:4)

1. Nauchno-issledovatel'skiy institut elektrofizicheskoy apparatury Gosudarstvennogo komiteta po ispol'zovaniyu atomnoy energii SSSR i Institut teoreticheskoy i eksperimental'noy fiziki Gosudarstvennogo komiteta po ispol'zovaniyu atomnoy energii SSSR.
(Electromagnets) (Synchrotron)

TIMROT, Yelena Sergeyevna, kand. tekhn. nauk; FEDOTOV, G.N., red.; GAVALOV, O.V., red. izd-va; KASIMOV, D.Ya., tekhn.red.

[Descriptive geometry]Nachertatel'naia geometriia. Moskva, Gosstroiizdat, 1962. 278 p. (MIRA 15:11)
(Geometry, Descriptive)

BELOUSOV, M.S., kand. ekon. nauk, dots.; VORONIN, M.G., kand. ekon. nauk; DUNDUKOV, G.S., kand. ekon. nauk, dots.; KAMYSHANOV, P.I., kand. ekon. nauk; KOLESOV, V.S.; KUPRIYENKO, A.N., kand. ekon. nauk; PEN'KOV, Ye.G., kand. ekon. nauk, dots.; SOLONEVICH, F.F., Prinimal uchastiye SMORODIN, M.B.; MUKHIN, N.A., retsenzent; FEDOTOV, G.N., retsenzent; STARCHAKOVA, I.I., red.; KIRAKOZOVA, N.Sh., red.; MEIRISH, D.M., tekhn. red.

[Accounting in commerce] Bukhgalterskii uchet v torgovle. [By] M.S.Belousov i dr. Moskva, Gostorgizdat, 1963. 528 p. (MIRA 17:1)

1. Prepodavateli kafedry bukhgalterskogo ucheta Moskovskogo instituta narodnogo khozyaystva im. G.V.Plekhanova(for Belousov, Voronin, Dundukov, Kamyshanov, Kolesov, Kupriyenko, Pen'kov, Solonevich). 2. Glavnyy bukhgalter Soyuza potrebitel'skikh obshchestv RSFSR (for Fedotov).

FEDOTOV, G.V. (Moskva)

Mechanism of asymmetrical secretory activity of parotid glands in horses. Fiziol. zhur. 46 no.10:1265-1268 O '60. (MIRA 13:11)
(PAROTID GLANDS) (HORSES--PHYSIOLOGY)

FEDOTOV, I. A.

USSR/Forestry - Forest Cultures. K.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15404

Author : I.A. Fedotov
Inst : -
Title : Mixed Siberian Larch Cultures in the South East. (Smeshannyye kul'tury listevennitsy sibirskoy na Yugo-vostoke).

Orig Pub : Lesn. kh-vo, 1957, No 3, 25-27

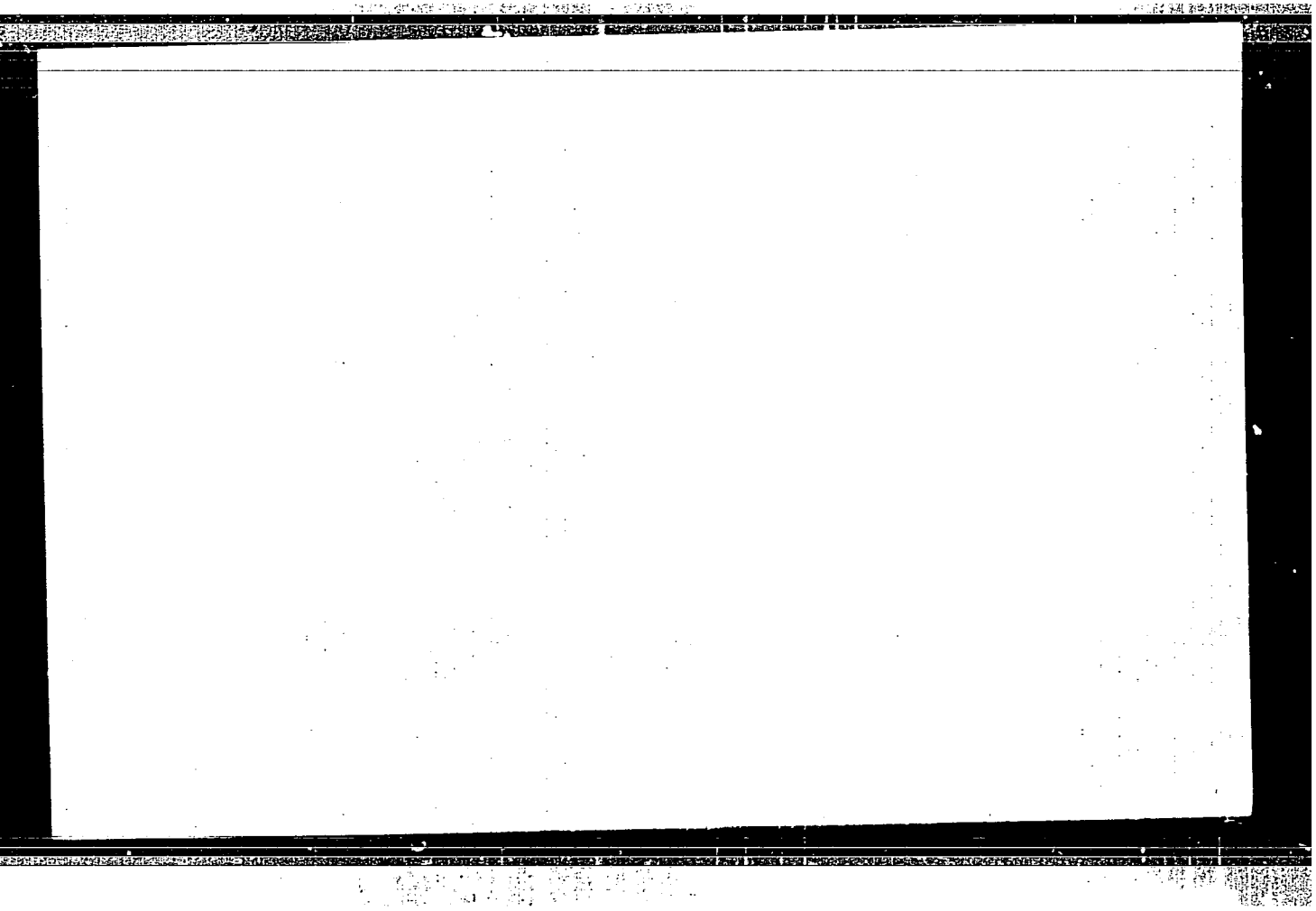
Abstract : When putting together mixed plantations in the South East, it is recommended that the following species accompany the Siberian larch: the Norway maple, the green and white ash (Fraxinus viridis Mchx. and F. american L.), the small-leaved lime tree, the common elm, the spruce and pine, whereas it is recommended that the pine be planted in flower beds.

Card 1/1

FEDOTOV, I., master proizvodstvennogo obucheniya

Special aspects of machine operators training. Prof.-tekh. obr. 18 no.9:6 S '61. (MIRA 14:11)

1. Remeslennoye uchilishche No.32, Leningrad.
(Leningrad--Vocational education)
(Plastics industry)



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S/136/61/000/001/008/010
E193/E283

AUTHORS: Glukhov, V.P., Sitnikova, T.G. and Fedotov, I.A.

TITLE: Recovery of Selenium from Slimes by the LGI Method on Pilot Scale Plant

PERIODICAL: Tsvetnyye metally, 1961, No.1, pp.83-84

TEXT: A method, based on oxidizing roasting of granulated slimes followed by absorption of selenium anhydride by a separate layer of hot sodium carbonate, has been developed at the Leningradskiy Gorniy Institut (Leningrad Mining Institute). The selenium-bearing compounds, obtained in this manner, can be processed either by precipitation of selenium from acidic solutions, or by reduction and precipitation of selenium from selenide solutions. The main advantage of this process over the current method of roasting an intimate mixture of slime and sodium carbonate is that higher recovery of selenium is attained in fewer operations, whereby the consumption of materials and electric power is reduced. In pilot plant scale trials, conducted in August and September, 1960 at one of the Soviet Works, slimes from electrolytic refining of copper, containing 6.0-8.0% Se, 1.0% Te, 19-20% Cu, 25% Ni, 1.5% Fe, 3.0% S,

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Recovery of Selenium from Slimes by the LGI Method on Pilot Scale Plant

and 25-30% H_2O, were used as the raw material. The main constituents of the slimes were copper and nickel oxides, 85% of nickel being present in the form of bunsenite, NiO. Selenium was present as Ag_2Se and partly in the form of selenides of the platinum metals. The roasting plant consisted of an air heater, a slimes roasting furnace, 2 (1st and 2nd) sodium carbonate furnaces for absorption of selenium, heat exchanger for gases, 2 vacuum pumps, and a pan granulator for pelletizing the raw materials. After preliminary drying (in a vacuum drier) to a moisture content of 15-16%, the slimes were converted to granules 3-10 mm in diameter. Sodium carbonate was granulated in a similar manner after preliminary moistening to a moisture content of 30-33%, and both materials (in the wet state) were then charged into the furnace. After all leaks had been sealed with asbestos tape, the vacuum pump and the roasting furnaces were switched on. At the same time, the fire box of the heater was ignited and air, pre-heated to 600-700°C, was fed into the furnace. In the new method, the heat required for roasting the

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S/136/61/000/001/008/010
E193/E283

Recovery of Selenium from Slimes by the LGI Method on Pilot Scale Plant

charge is supplied mainly by air, the heating elements of the electric furnace serving only to compensate the heat losses. The operating temperature of 620-650°C is attained in 2-3 h. The charge is roasted in a stationary layer (no rabbling is employed), the duration of the process depending on the specific air consumption per unit weight of slime which, in this particular case, amounts to 5-6 m^3/kg. With 800-900 kg (dry weight) of slime charged in the furnace, operating at 620-630°C, the specific air consumption of 6 m^3/kg of slime is sufficient to ensure that all selenium di-oxide is distilled off from the charge, the selenium content in the slime residues being 0.01-0.1%. 90% of selenium present in the gaseous phase is absorbed by the first layer of sodium carbonate which, after the completion of the process, contains 20-21% selenium. After roasting, the furnaces are cooled and discharged. The slime residue is subjected to further processing, and the selenium-rich sodium carbonate (from the 1st furnace) is transferred to the selenium shop, where it is dissolved in water, after which selenium is precipitated (with sulphur dioxide) from the acidified solution.

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S/136/61/000/001/008/010
E193/E283

Recovery of Selenium from Slimes by the LGI Method on Pilot Scale Plant

Sodium carbonate from the 2nd furnace is used again until it becomes saturated with selenium. At present, work is being completed on designing an industrial plant (expected to be in operation at the beginning of 1961) for recovery of selenium from slimes by the process described above.

Card 4/4

ODINTSOV, V.A.; SOLOV'YEV, V.S.; FEDOTOV, I.D.

Experimental determination of the exponent of the polytropic curve for the detonation products of certain liquid explosives. Izv. vys. ucheb. zav.; fiz. no.5:86-88 '62. (MIRA 15:12)

1. Moskovskoye vysshaye tekhnicheskoye uchilishche imeni Baumana.

(Explosives)

PAVLOV, V.A.; KRYUCHKOV, N.F.; FEDOTOV, I.D.

Temperature dependence of the elasticity modulus of aluminum-magnesium α-solid solutions. Fiz.met. i metalloved. 3 no.3:555-557 '56. (MIRA 10:3)

1. Institut fiziki metallov Ural'skogo filiala AN SSSR.
(Aluminun-magnesium alloys)

Fedotov, Ivan Dmitriyevich

PHASE I BOOK EXPLOITATION 238

Betekhtin, Sergey Aleksandrovich; Vinitskiy, Andrey Mikhaylovich, Gorokhov, Mikhail Semnovich; Stanyukovich, Kirill Petrovich; Fedotov, Ivan Dmitriyevich.

Gazodinamicheskiye osnovy vnutrenney ballistiki (Gas Dynamic Principles of Interior Ballistics) Moscow, Oborongiz, 1957. 384 p. 4,500 copies printed.

Gen. Ed.: Stanyukovich, Kirill Petrovich, Doctor of Technical Sciences, Professor; Reviewers: Serebryakov, M.Ye., Doctor of Technical Sciences, Professor; Orlov, B.V., Doctor of Technical Sciences, Professor; Tolochkov, A.A., Doctor of Technical Sciences, Professor; Ed.: Malyshev, M.V., Engineer; Ed. in charge: Sokolov, A.I.; Publishing Ed.: Bogomolova, M.F.; Tech. Ed.: Zudakin, I.M.

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Gas Dynamic Principles of Interior Ballistics (Cont.)

PURPOSE: This book was approved by the Ministry of Higher Education of the USSR as a manual for higher technical institutes. It can also serve as a textbook for university students of mechanics and mathematics, and for students of higher military institutes.

COVERAGE: This work contributes to the theory of internal ballistics by including chapters on wave processes occurring during a discharge. Principles of gas dynamics of transient processes are presented as a new element in the study of internal ballistics. The analytical solution of the Lagrange ballistic problem and the motion of a missile and of the gas-powder mixture in the case of true burning are discussed. These problems are also treated numerically. Simple and accurate solutions of problems in classical internal ballistics for relatively large projectiles are given by means of the generalized Drozdov method. One of the coauthors of this work, Betekhtin S.A., died in 1953, in the line of duty.

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Gas Dynamic Principles of Interior Ballistics (Cont.)

Chapter VI was written by S.A. Betekhtin, Chapter III and IV by S.M. Vinitskiy, Chapter II by S.M. Vinitskiy and K.P. Stanyukovich; Chapter VIII was written by S.M. Gorokhov, Chapters I and V and the introduction by K.P. Stanyukovich and Chapter VII by I.D. Fedotov. There are 82 figures, 59 tables, and several references in footnotes.

TABLE OF CONTENTS:

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Gas Dynamic Principles of Interior Ballistics (Cont.)

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Gas Dynamic Principles of Interior Ballistics (Cont.)

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Gas Dynamic Principles of Interior Ballistics (Cont.)

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Gas Dynamic Principles of Interior Ballistics (Cont.)

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Gas Dynamic Principles of Interior Ballistics (Cont.)

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Gas Dynamic Principles of Interior Ballistics (Cont.)

Card 9/10

Gas Dynamic Principles of Interior Ballistics (Cont.)

AVAILABLE: Library of Congress

BK/lsb
27 May 1958

Card 10/10

FEDOTOV, I. D.

126-2-27/35

AUTHORS: Pavlov, V. A., and Kryuchkov, N. F., and Fedotov, I. D.

TITLE: New peaks of internal friction at low temperatures. (Novye piki vnutrennego treniya pri nizkikh temperaturakh).

PERIODICAL: Fizika Metallov i Metallovedeniye, 1957, Vol.5, No.2, pp.371-372 (USSR)

ABSTRACT: The internal friction was measured at low temperatures for pure aluminum and an aluminum alloy with 3% magnesium. The internal friction was measured for transverse oscillations with frequencies of the order of 1200 to 1300 c.p.s. using a test set-up described in an earlier paper (Ref.1). The specimens were made in the form of circular rods 200 mm long and 11 mm dia. The measurements have shown that in the temperature range from room temperature down to that of liquid nitrogen two maxima of internal friction exist in the temperature ranges -50 to -90°C and -170 to -180°C respectively. On approaching the temperature of liquid nitrogen, the internal friction increases which indicates the possibility of existence of an internal friction peak at temperatures below -196°C, see Fig.1. The peak of internal friction in the range -170 to -180°C was earlier observed on a number of metals and was attributed to the movement of dislocations under

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the effect of stresses (Ref.2). The peak of internal friction at -50 to -80°C and the increased internal friction at -196°C have been observed for the first time. The obtained internal friction peaks cannot be explained easily by the movement of dislocations since a sufficiently strong dependence is observed of the amplitude of the peaks on the preceding heating temperature. From the obtained data the activation energies were determined of the processes which correspond to the internal friction peaks. For the internal friction peaks at -50 to -80°C the activation energy equals 0.5 eV, for the peak at -170 to -180°C it equals 0.14 eV and for the internal friction in the range of -196°C it equals about 0.05 eV. In accordance with the classification of defects of the crystal lattice according to their mobility (Ref.3), the most likely assumption is that the internal friction peak at -50 to -80°C corresponds to diffusion of individual vacancies, the peak at -170 to -180°C corresponds to the diffusion of groups of vacancies and the increased internal friction at -196°C corresponds to the diffusion of more mobile defects, which may possibly have penetrated into the inter-nodes of the atoms.

New peaks of internal friction at low temperatures. 126-2-27/35

Attention is drawn to the fact that the total quantity of defects of a crystal lattice in aluminum alloys with magnesium is larger than in pure aluminum. Further investigations will permit obtaining more accurate conceptions on the nature of the peaks of internal friction. The internal friction as a function of the temperature is graphed in Fig.1 for pure aluminum and for an alloy of aluminum with 3% magnesium.
There are 1 figure and 3 references, 2 of which are Slavic.

(Note: This is a complete translation).

SUBMITTED: July 22, 1957.

ASSOCIATION: Institute of Physics of Metals, Ural Branch of the Ac.Sc. USSR (Institut Fiziki Metallov Ural'skogo Filiala AN SSSR).

AVAILABLE: Library of Congress.

Card 3/3

FEDOTOV, I. D.

126-2-29/35

AUTHORS: Pavlov, V.A., Kryuchkov, N. F., and Fedotov, I. D.

TITLE: Temperature dependence of the modulus of elasticity of alloys of nickel with copper. (Temperaturnaya zavisimost' modulya uprugosti splavov nikelya s med'yu).

PERIODICAL: Fizika Metallov i Metallovedeniye, 1957, Vol.5, No.2, pp. 374-376 (USSR)

ABSTRACT: The temperature dependence of the modulus of elasticity of alloys of nickel with copper was investigated for the purpose of studying the character of the changes of the inter-atomic bond forces on changing the concentration of a solid solution. The modulus of elasticity was measured during transverse vibrations of the specimen with a frequency of about 700 c.p.s. on a test rig described in an earlier paper (Ref.1) in the temperature range -196 to +700°C. The measurements at low temperatures were effected inside a specially designed cryostat made of a 600 mm long, 35 mm dia. thick walled copper tube with a 5 mm wide slot at one side of the bottom of the tube. From the outside a copper coil was soldered on for feeding in liquid nitrogen. The tube and the coil were fitted inside a housing filled with thermal insulation. The specimen was suspended in the cryostat on two thin wires

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Temperature dependence of the modulus of elasticity of alloys of nickel with copper.

which were brought out to the outside through the slot in the tube and were connected to the exciter and to the receiver of the oscillations. The uniformity of the temperature distribution along the specimens was maintained within the limits of 1°C. The specimens were of 7 mm dia. and 200 mm long. The initial materials for preparing the specimens were 99.99% pure electrolytic nickel and electrolytic copper with a total quantity of admixtures not exceeding 0.05% including 0.02% oxygen. The metals were smelted in vacuum of 10^{-5} mm Hg for eliminating gases and then the alloys were produced in a high frequency furnace under vacuum. The ingots were forged into square cross section rods of 14 x 14 mm dia; the pure nickel specimens were annealed in vacuum at 800°C, whilst the alloy specimens were annealed at 900°C for three hours and the same annealing procedure was applied for all the alloys which were used for studying the mechanical properties. The results of the measurements are graphed in Fig.1 where curve 1 expresses the temperature dependence of the modulus of elasticity of the pure nickel, whilst

Temperature dependence of the modulus of elasticity of alloys of nickel with copper.

curves 2, 3 and 4 give the same dependence for nickel alloys containing 10, 20 and 40% Cu. The modulus of elasticity was measured without applying a magnetic field and, therefore, the defect of the modulus caused by magnetostriction phenomena is clearly pronounced. The temperature dependence of the modulus of elasticity for pure nickel is in good agreement with the results of measurements published by Köster, W. (Ref.2). It can be seen from the graph that the modulus of elasticity falls monotonously with increasing concentration of the copper in the solid solution throughout the investigated temperature range. This is in agreement with the results of X-ray investigations of the characteristic temperature carried out on the same alloy by Noskova, N. I., and Pavlov, V. A., (to be published in the same journal). Fukuroi, T., and Shibya, J., (Ref.4) observed a non-monotonous change of the modulus of elasticity as a function of the copper concentration, namely, that the modulus increased somewhat in the range of concentrations of 30 to 40% Cu. In alloys of nickel with copper, a nonuniform

 distribution of the copper atoms in the volume of the solid

Temperature dependence of the modulus of elasticity of alloys of nickel with copper.

solution can take place (Ref.5). Certain changes in the modulus of elasticity, which depend on the preliminary thermo-mechanical treatment of the alloys, may be due to this phenomenon. In the here described case all the alloys were annealed at a sufficiently high temperature and the non-uniform distribution of the atoms in the solid solution was apparently little pronounced. For such alloys it is of interest to investigate the dependence of the modulus of elasticity on the thermomechanical treatment.
There are 1 figure and 5 references, 2 of which are Slavic.

(Note: This is a complete translation).

SUBMITTED: July 25, 1957.

ASSOCIATION: Institute of Physics of Metals, Ural Branch of the Ac.Sc. USSR. (Institut Fiziki Metallov Ural'skogo Filiala AN SSSR).

AVAILABLE: Library of Congress.

BULGAKOVA, A.A., OHLENKO, L.P., FEDOTOV, I.D.

Loosening stuck drills without tearing off the pipe. Prikl. geofiz. no.26:253-266 '60. (MIRA 13:8)
(Oil well drilling)

BARANUL'KO, V.A.; FEDOTOV, I.F.

Letter to the editor; Radio echo from lightning. Radiotekhnika 10 no.11:80 N '55. (MLRA 9:3)

(Radio waves)

IVSHIN, P.Ya., inzh.; FEDOTOV, I.F., inzh.

Improving the accounting for the utilization of a fleet of locomotives. Zhel.dor.transp. 45 no.7:51-52 Jl '63. (MIRA 16:9)
(Railroads--Accounting) (Locomotives)

YAKIN, A.A., inzh.; GOL'DSHTEYN, V.M., kand. tekhn. nauk; BORODA'HEV, I.P., kand. tekhn. nauk; FELOTOV, I.F., kand. tekhn. nauk, retsenzent; KR[illegible], M.N., inzh., red.

[Calculations for bulldozers with track-laying treads] Raschet bul'dozera na gusenichnom khodu. Moskva, 1963. 128 p. (MIRA 18:1)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut stroitel'nogo i dorozhnogo mashinostroyeniya.

FEDOTOV, I.F., inzh.

Determining the time and speed in freight delivery. Zhel. dor. transp. 47 no.7:72-73 Jl '65. (MIRA 18:7)

ACC NR: AP6025675 SOURCE CODE: UR/0413/66/000/013/0145/0145

INVENTORS: Akat'yev, V. I.; Fedotov, I. F.; Aver'yanov, S. V.

ORG: none

TITLE: A device for spreading layers of liquid adhesive substances on fabric. Class 62, No. 183601

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 145

TOPIC TAGS: glue, fabric, fabric coating, filler, aircraft propeller

ABSTRACT: This Author Certificate presents a device for spreading layers of adhesive substances on fabric such as, for example, honeycombed filler in the interior of aircraft propellers. The device contains a glue-applying mechanism consisting of glue-depositing and glue-spreading rollers placed in a bath, a drying chamber with exhaust ventilation, and an arrangement for circulating and pressing the adhesive substance in the bath. The latter arrangement consists of a tank, a mixer, interconnected pressure and exhaust pumps, a glue mixer with a glue-spreading mechanism, a drive, and a control panel. To improve the productivity and quality of the fillers, the device is provided with a dual chain conveyer with locks rigidly connected to the chain. The locks contain a bearing plate and a pin with an aperture and with a catch for directing the bearing plate (the aperture and the pin are freely connected to the plate), and a lever with grooves on an axle rigidly connected to the bearing plate and freely

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UDC: 629.13.01/06 681.92/94

ACC NR: AP6025675

connected through the aperrures to the directing plates that move and turn the honeycombed filler throughout its cycle (see Fig. 1).

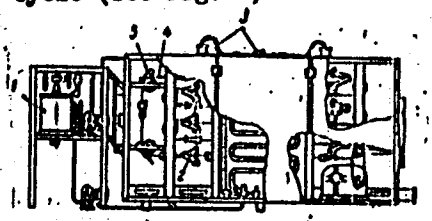

Fig. 1. 1 - circulating arrangement; 2 - glue-spreading mechanism; 3 - mechanism for automatic opening and closing of the bath lids; 4 - conveyer chain; 5 - lock

To maintain a constant viscosity of the adhesive substance in the course of the process, the bath is provided with lids that can be automatically opened and closed. Orig. art. has: 1 figure.

SUB CODE: 01, 13, 11/ SUBM DATE: 03May65

Card 2/2

FEDOTOV, I.G.

AUTHOR: Fedotov, I.G., Dotsent 3-58-6-18/34

TITLE: The Chair Is Conducting Complex Examinations (Kafedra provodit kompleksnyye ekzameny)

PERIODICAL: Vestnik Vysshey Shkoly, 1958, Nr 6, pp 72 - 74 (USSR)

ABSTRACT: In order to improve the training of specialists, the Chair "Building Production" of the Saratov Automobile-Roads Institute had set itself the task of giving the students more independence by abolishing the practice of very close supervision over their work, especially in the senior course. The weekly, and sometimes daily control of the students' lessons took much of the instructors' time and developed irresponsibility on the students' part. To put the work on a new basis, the chair has reorganized all the lessons and effected some changes in the method of delivering lectures. More time has been allotted for the students' independent laboratory work, and more emphasis is being put on the chair's scientific research work. The author deals with the contact established with the building organizations of Saratov and with the changed form of examinations.

ASSOCIATION: Saratovskiy avtomobil'no-dorozhnyy institut (Saratov Highway Institute)

Card 1/1

FEDOTOV, I.G., BELOV, A.V.; KRAVTSOV, F.Ye.; MASHIN, A.R.; PUTYAKOV, K.P.; REZNICHENKO, F.I.; SEMENOV, N.S.; SHEVCHENKO, N.I.; BAUM, G., red.; BYKOVA, E., tekhn.red.

[Brief handbook for builders] Kratkii spravochnik stroitelia. Saratov, Saratovskoe knizhnoe izd-vo, 1959. 521 p. (MIRA 12:12)

(Building)

SHEVCHENKO, N.I.; FEDOTOV, I.G.; KRAVTSOV, F.Ye.; SEMENOV, N.V.; REZNICHENKO, F.I.; PUTYAKOV, K.P.; MASHIN, A.R.; BELOV, A.V.; KOSTINA, V., red.; LUKASHEVICH, V., tekhn. red.

[Builder's handbook] Spravochnik stroitelia. Izd.2., perer. i dop. Saratov, Saratovskoe knizhnoe izd-vo, 1962. 478 p. (MIRA 16:4)
(Building--Handbooks, manuals, etc.)

BARANOVA, A.G.; FEDOTOV, I.I. (Kazan')

Developing creative initiative in students. Mat. v shkole no.4: 18-20 Jl-Ag '63. (MIRA 16:9)
(Mathematics--Study and Teaching)

24.1200

38175
S/058/62/000/004/080/160
A058/A101

AUTHORS: Kuznetsov, V. N., Fedotov, I. I.

TITLE: Variation of the propagation velocity and attenuation of ultrasonic waves in magnetized ferrites

PERIODICAL: Referativnyy zhurnal, Fizika, no. 4, 1962, 38-39, abstract 4G322 (V sb. "Primeneniye ul'traakust. k issled. veshchestva". v. 13, Moscow, 1961, 207-211)

TEXT: Using the pulse method, the authors measured in the frequency range 1-6 Mc the variation of the velocity and attenuation of longitudinal ultrasonic waves in ferrite specimens incident to application of a magnetizing field. It was established that ultrasonic velocity in ferrites increases with increase in the magnetizing field, attaining some maximum magnitude, while attenuation decreases to a limit, the magnitude of which depends on the frequency. The given effects are associated with the orientation of domain magnetic moments with respect to the field. The maximum possible increment of ultrasonic velocity in magnetic fields decreases with increasing frequency. The increments of

Card 1/2

S/058/62/000/004/080/160
A058/A101

Variation of the propagation velocity ...

ultrasonic velocity in ferrites incident to magnetization are different for ferrites of different composition. It is greatest for nickel ferrites containing 50% NiO and 50% Fe_2O_3.

I. Viktorov

[Abstracter's note: Complete translation]

Card 2/2

38761

S/194/62/000/005/072/157
D222/D308

24,1800
15.2420

AUTHORS: Fedotov, I.I., and Kuznetsov, V.N.

TITLE: Measuring the velocity of ultrasound in a polarized barium titanate ceramic

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 5, 1962, abstract 5-5-30 u (V sb. Primeneniye ul'traakust. k issled. veshchestva, no. 14, M., 1961, 269-273)

TEXT: The results of an investigation into the influence of temperature and of a constant electric field on the velocity of propagation of longitudinal ultrasonic waves in barium titanate ceramics are given. Investigations were carried out with unpolarized polycrystalline barium titanate in the form of circular plates of 3 - 7.5 mm thickness and 25 - 30 mm diameter. The density of the specimens was 5.25 - 5.45 g/cm^3. The velocity of the longitudinal waves was measured with a B4-8P (V4-8R) ultrasonic flaw detector and thickness measuring instrument. It was established that the velocity of longitudinal waves in barium titanate ceramics changes with the tem-

Card 1/2

Measuring the velocity of ...

perature, reaching a minimum value at the temperatures of phase changes; when the polarizing field is increased the influence of temperature is reduced; the variation of ultrasonic wave velocity under the influence of the polarization has a hysteresis character. The variation of the coercive force of the remnant $\Delta v/v$ as a function of temperature between -20 to + 50°C (v is the velocity of the ultrasonic wave) was investigated. The results are given in the form of graphs. 10 references. [Abstractor's note: Complete translation].

Card 2/2

S/275/63/000/001/027/035
D413/D308

AUTHOR: Fedotov, I. I.

TITLE: The variation in the velocity of ultrasonic waves during the process of polarization of barium titanate in constant fields

PERIODICAL: Referativnyy zhurnal, Elektronika i yeye primeneniye, no. 1, 1963, 11, abstract 1V 82 (In collection: Primeneniye ul'traakust. k issled. veshchestva, no. 15, M., 1961, 201-205)

TEXT: An experimental investigation has been made into the variation in velocity of longitudinal ultrasonic waves in barium titanate as a function of the magnitude and time of action of the polarizing field. The velocity was measured by the resonance technique to an accuracy of 1%. The maximum variation in velocity over 140 min in fields up to 15 kV does not exceed 7%. The velocity increases nonlinearly with increase in the field intensity and the polarization time. The increase in velocity in intense fields corres-

Card 1/2

ponds to the ΔE-effect in ferromagnetic substances. The dependence of velocity on polarization time is related to the comperative difficulty with which reorientation of domains takes place in a piezoelectric material. Weak fields give rise only to slight rise of veloxity with time. A substantial increase in velocity occurs only in fields of intensity >4 kV/cm, whose energies are sufficient for 90° displacement of the boundaries. After 20 minutes the rise in velocity in very intense fields slows down, since the process of alteration of the domain structure is nearly complete. The relationship of velocity rise to field intensity is similar to that of polarization. The results of the experiment are shown in the form of graphs. The ultrasonic technique may be used for the study of polarization processes. 3 references. [Abstracter's note: Complete translation.]

Card 2/2

DROZDOV, N.A.; BELOUSOV, G.A.; FEDOTOV, I.I.; CHEBYKIN, V.N.; ZADNEPROVSKIY, A.Ya., kand.tekhn.nauk, red.; BOBROVA, Ye.N., tekhn.red.

[Selection of locomotive runs and methods of servicing locomotives] Vybor tiagovykh plech i sposobov obsluzhivaniia lokomotivov. Moskva, Gos.transp. zhel-dor. izd-vo, 1958. 134 p. (Moscow, Vsesoiuznyi nauchno-issledovatel'skii institut zheleznodorozhnogo transporta. Trudy, no.158) (MIRA 12:1)
(Locomotives)

FEDOTOV, I. I.

25852. FEDOTOV, I. I. sovershens tvovanie krupnogo rogatogo skota v sovkhozakh kirgizii. Sov zootekhniya, 1949, No. 4, S. 17-30.

So. Letopis' Zhurnal'nykh Statey, Vol. 34, Moskva, 1949

FEDOTOV, I.I.

P.I. Mel'nikov and I.I. Fedotov, Vysokogornyy plemennoy sovkhoz imeni Il'icha [The High-Mountain Stockbreeding Sovkhoz imeni Il'ich] , Sel'khozgiz, 8 sheets.

The book describes the experience of an advanced sovkhoz, a farm with many branches of agriculture, its achievements in livestock farming and in other branches of agriculture.

Intended for kolkhoz and sovkhoz workers.

SO: U-6472 15 Nov 1954

ODYNETS, R.N.; KANYGINA, K.I.; YAKOVLEV, V.G.; FANTALIS, I.A.; KORNEYEV, D.N.; [deceased]; MEL'NIKOV, P.I.; FEDOTOV, I.V.

Effect of icdinated casein on protein, calcium and phosphorus metabolism in dairy cows. Trudy Inst. zool. i paraz. KirFAN SSSR no.2:3-20 '54. (MIRA 10:6)
(Iodine) (Cows--Feeding and feeding stuffs) (Metabolism)

AUTHORS: Malov, N. N., Orlova, N. P., Selivanenko, N. Ye., Fedotov, I. I. S/053/60/070/02/010/016 B006/B007

TITLE: Several Demonstration Lectures in a Course on Physics

PERIODICAL: Uspekhi fizicheskikh nauk, 1960, Vol 70, Nr 2, pp 375-377 (USSR)

ABSTRACT: The present article describes several demonstrations carried out at the physics room of the Moskovskiy gosudarstvennyy pedagogicheskiy institut imeni Lenina (Moscow State Pedagogical Institute imeni Lenin), and given at the Moscow Colloquium of Physicists on May 13, 1959. The demonstrations concern: 1) Foucault's experiment, 2) Newton's third law, 3) The conservation of the mechanical angular momentum, 4) The comparison of electric oscillation frequencies, 5) The penetrability of X-rays, 6) The magnetic field in the interior of a conducting tube, and 7) a model of Stern's experiment. There are 5 figures.

Card 1/1

Fedotov, I. L.

USSR/Engineering - Construction

Card 1/1 : Pub. 70 - 4/11

Authors : Molochnikov, N. L., and Fedotov, I. L.

Title : New arrangement for elimination of ice around dredgers

Periodical : Mekh. stroi. 4, 12-14, Apr 1954

Abstract : A new arrangement for the elimination of ice around dredges, working on the construction of the large Kuybyshev Hydroelectric Station on the Volga River, is described. Each dredge was provided with 6 - 10 propeller-type pumps which, by their rotating motion, do not allow ice to form or break up already formed ice. Illustration; drawings.

Institution : .....

Submitted : .....

DROZDOV, N.A.; SEMIN, A.N.; FEDOTOV, I.I.; BARANCHEYEV, S.S.; KAMENEV, M.N.

[Location and automation of supply systems on railroads with diesel and electric traction] Razmeshchenie i avtomatizatsiia ekipirovochnykh ustroistv pri elektrovoznoi i teplovoznoi tiage. Moskva, Vses.izd-ko poligr. ob"edinenie m-va putei soob., 1960. 73 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut zheleznodorozhnogo transporta. Trudy, no.199). (MIRA 13:9)

(Railroads--Equipment and supplies)

FEDOTOV, I.I.; KUZNETSOV, V.N.

Measuring the speed of ultrasound in polarized ceramics based on barium titanate. Prim. ul'traakust. k issl. veshch. no.14:269-273 '61. (MIRA 14:12)

(Ultrasonic waves--Speed) (Barium titanate)

FEDOTOV, I.I.

Change in ultrasonic speed during the polarization of barium titanate in constant fields. Prim. ul'traakust. k issl. veshch. no.15:201-205 '61. (MIRA 16:8)

(Barium titanate) (Ultrasonic waves--Speed)
(Polarization (Electricity))

FEDOTOV, I.I., inzh.; SHUVALOV, N.G., inzh.; ZADNEPROVSKIY, I.Z., inzh.; KHAZANOVSKIY, P.M., inzh.; SLOMCHINSKIY, V.V., inzh.

New method for saturating and drying the stator windings of asynchronous electric motors. Vest. elektroprom. 32 no.4:28-31 Ap '61. (MIRA 15:5)

(Electric motors, Induction—Windings)

FEDOTOV, I.I., inzh.; GUR'YEV, G.M., inzh.; PETRULENKO, V.Ye., inzh.; KHAZANOVSKIY, P.M., inzh.

Saturation and drying of the windings of asynchronous motors. Vest. elektroprom. 33 no.10:71 O '62. (MIRA 15:9)
(Electric motors, Induction—Drying)

RYLEYEV, G.S.; KRYUGER, P.K.; KAZAKOV, V.N.; VIL'KEVICH, B.I. Prinimal uchastiye BELEN'KIY, M.N.; FEDOTOV, I.I., kand. tekhn. nauk, retsenzent; LUGININ, N.G., kand. tekhn. nauk, retsenzent; CHEBYKIN, V.N., kand. tekhn. nauk, retsenzent [deceased]; ONISHCHENKO, I.T., kand. tekhn. nauk, retsenzent; TELICHKO, V.G., inzh., retsenzent; ISIKOV, Ye.N., inzh., retsenzent; ROZHDESTVENSKIY, A.S., inzh., retsenzent; MEDVEDEVA, M.A., tekhn. red.

[Management and operation of diesel locomotives] Teplovoznoe khoziaistvo. Izd.2., perer. i dop. [By] G.S.Ryleev i dr. Moskva, Transzheldorizdat, 1963. 290 p.
(MIRA 17:3)

ACCESSION NR: AP4020296 S/0139/64/000/001/0032/0038

AUTHOR: Fedotov, I. I.

TITLE: ΔE-effect and retardation of polarization processes in barium titanate

SOURCE: IVUZ. Fizika, no. 1, 1964, 32-38

TOPIC TAGS: barium titanate, polarization, modulus of elasticity, ballistic galvanometer, nonlinear curve, polarized crystal

ABSTRACT: Experimental investigations have been made of changes in the modulus of elasticity and polarization vector in ceramic barium titanate as functions of electric field potential and its time rate of change. The polarization retardation process was measured using a ballistic galvanometer with ballistic residue n as a function of time t. For E = 2.5 kv/cm n increases, reaches a maximum and drops sharply. The relationship between the polarization emf, P(t), and n(t) is shown to be linear. The relative change in the Young's modulus ΔE/E is presented graphically as a function of E and t. Increasing the magnitudes of E(kv/cm) and t(minutes), the relative growth in Young's modulus shows qualitatively the same properties as the increase in the polarization vector. The curve is a monotonous and nonlinear growth and changes linearly with the square of the polarization

Card 1/2

ACCESSION NR: AP4020296.

vector. Among the reasons given to explain this ΔE-effect are the production and growth of 90 domains related to large internal stresses in the crystal and large deformations created at the surface layer of a homogeneous polarized crystal. "The author expresses his gratitude to Professor N. N. Malov under whose guidance this work was accomplished." Orig. art. has: 9 figures and 3 formulas.

ASSOCIATION: Ryazanskiy gospedinstut (Ryazan State Teachers Institute)

SUBMITTED: 29Oct62	DATE ACQ: 31Mar64	ENCL: 00
SUB CODE: IC	NO REF SOV: 007	OTHER: 005

Card 2/2

BR

ACCESSION NR: AP4013528 S/0181/64/006/002/0602/0610

AUTHOR: Fedotov, I. I.

TITLE: The effect of changes in the elastic modulus in barium titanate

SOURCE: Fizika tverdogo tela, v. 6, no. 2, 1964, 602-610

TOPIC TAGS: elastic modulus, barium titanate, temperature dependence, ultrasonic wave

ABSTRACT: Experimental studies were made on the dependence of Young's modulus on temperature, magnitude of electrical field, and duration of electrical field. The samples were round plates of barium-titanate ceramic material and were tested by transmission of ultrasonic longitudinal waves through the thickness of the plate. The modulus-change effect ($\Delta E/E$) changes steadily but nonlinearly with increase in electrical field strength and with duration of the field. Young's modulus changes with temperature and reaches minimal values in the regions of phase transition. It changes in the electrical field along the path of a hysteresis curve, but neither its value nor sign depend on direction of the polarizing field. The effect is even. The basic curves of $\Delta E/E$ are similar in shape to the

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ACCESSION NR: AP4013528

polarization curves. The principal cause of the effect and its dependence on time is found in domain processes. Young's modulus changes chiefly by 90° domain processes or by great deformation in single-domain crystals in the direction of the spontaneous-polarization axis. Since the modulus effect and polarization have similar trends, the modulus effect may be used for studying retardation processes of polarization by ultrasonic methods. "In conclusion, the author thanks Professor N. N. Malov for his constant aid in the work." Orig. art. has: 11 figures and 3 formulas.

ASSOCIATION: Ryazanskiy gosudarstvenny*y pedagogicheskiy institut (Ryazan State Pedagogical Institute)

SUBMITTED: 24Apr63 DATE ACQ: 03Mar64 ENCL: 00

SUB CODE: SS NO REF SOV: 012 OTHER: 018

Card 2/2

L 36098-66 EWT(m)/EWP(e)/EWP(k)/EWP(t)/ETI IJP(c) JD/GD

ACC NR: AT6013183 (N) SOURCE CODE: UR/0000/61/000/000/0269/0273

AUTHORS: Fedotov, I. I.; Kuznetsov, V. N.

ORG: none

TITLE: Measurement of the speed of ultrasound in polarized ceramics of barium titanate

SOURCE: Moscow. Oblastnoy pedagogicheskiy institut. Primeneniye ul'traakustiki k issledovaniyu veshchestva, no. 14, 1961, 269-273

TOPIC TAGS: barium titanate, electron polarization, ultrasound, ultrasonic wave propagation, ceramics, temperature effect, physics laboratory instrument / PIU-1 physics laboratory instrument

ABSTRACT: The effect of temperature and the constant electrical field upon the propagation speed of longitudinal ultrasound waves in barium titanate ceramics have been investigated. The study was conducted with the samples of nonpolarized polycrystalline barium titanate plates, 3--7.5 mm thick and 25--30 mm in diameter. Polarization of barium titanate was performed in static fields by means of experimental apparatus PIU-1. The speed of the longitudinal waves was measured with the ultrasonic flaw detection gage V4-8P. Change of coercive force and of residual $\Delta v/v$ with temperature from -20 to +50C was also investigated (see Fig. 1). It was established that the speed of the longitudinal waves changes considerably with variations of temperature, as shown in Fig. 2. With the increase of the electrical

Card 1/2

L 36098-66

ACC NR: AT6013183

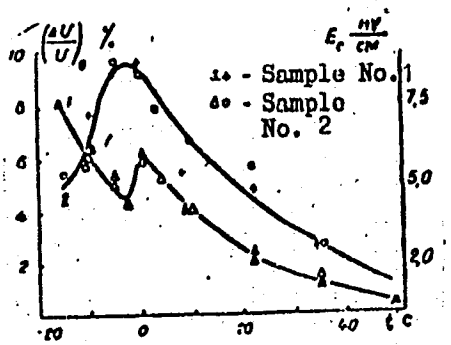


Fig. 1. Coercive force E_0(1) and "residual" $\Delta v/v$ (2) as functions of temperature. Measurements performed on two identical samples.

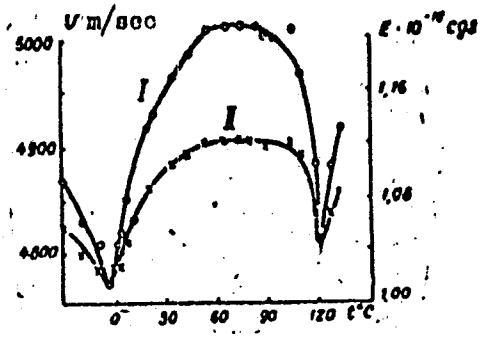


Fig. 2. Ultrasonic speed (I) and Young modulus (II) of $BaTiO_3$ ceramics as functions of temperature.

field, the temperature effect is decreased. Changes of ultrasonic speeds with changing polarizing field are hysteretic in character. The authors express their gratitude to Prof. N. M. Malov, who guided this work. Orig. art. has: 4 figures and 1 equation.

SUB CODE: 20,11/ SUBM DATE: 22Apr61/ ORIG REF: 006/ OTH REF: 004

Card 2/2 LS

FEDOTOV, I.L.

Study of the absorption method of measuring the concentration of active sediment. Izv.vys.ucheb.zav.; stroi. i arkhit. 4 no.6:84-90 '61. (MIRA 15:2)

1. Vsesoyuznyy nauchnyy inzhenerno-stroitel'nyy institut.
(Water—Purification)

FEDOTOV, I.L., inzh.

Automation of units for maintaining water pressure. Vod.i san.tekh. no.11:27 N '62. (MIRA 15:12)
(Automatic control) (Water--Distribution)

1. POPOV, V. YE. and LIBIN, B. L. and FEDOTOV, I. M.

2. USSR (600)

4. Agricultural Machinery

7. Mechanization of post-harvest handling of grain seed. Sel.i sem. 19 no. 12, 1952.

9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

ALEKSEYEV, Sergey Vladimirovich; BAUMSHTEYN, I.A., inzh.; LIBERMAN, A.Ya.; MALOV, V.S.; RAPOPORT, M.I.; FEDOTOV, I.M.; KHOMYAKOV, M.V., inzh.; TSAREV, M.I.; FRIDKIN, L.M., tekhn. red.

[Handbook on high-voltage power distribution networks] Spravochnik po elektricheskim setiam vysokogo napriazheniia. [By] S.V. Alekseev i dr. Izd.4., perer. i dop. Pod obshchei red. M.V. Khomiakova i I.A.Baumshteina. Moskva, Gosenergoizdat, 1962. 559 p. (MIRA 15:12)
(Electric power distribution--Handbooks, manuals, etc.)
(Electric lines--Overhead)

FEDOTOV, I.N., inzhener.

Snow and track cleaning semicar with overlapping conveyer. Zhel.dor. transp. 38 no.10:80-81 O '56. (MLRA 9:11)
(Railroads--Snow protection and removal)

FELOTOV, I.N., inzh.

Maintenance of generators of tracklaying machinery. Put' put. khoz. no.9:27-29 S '59. (MIRA 12:12)
(Electric generators--Maintenance and repair)
(Railroads--Electric equipment)

FEDOTOV, I.N., inzh.

New track template. Put' i put. khoz. 9 no.3:21-22 '65.
(MIRA 18:6)

FEDOTOV, I.F.

SUKHANOV, N.I., inzhener; FEDOTOV, I.P., inzhener; KOGNOVITSKIY, N.I., redaktor; ORLOV, Ye.T., redaktor; KOROVENKOVA, Z.A., tekhnicheskiy redaktor.

[Operator of a portable crane in shifting railway tracks in quarries] Mashinist rel'sovogo krana na peredvizhke putei v kar'erakh. Moskva, Ugletekhizdat, 1954. 171 p. (MLRA 7:11)
(Cranes, derricks, etc.) (Railroads--Track) (Quarries and quarrying)

FEDOTOV, I.P.

AUTHOR: Fedotov, I.P., (Chelyabinskaya Oblast') 47-58-3-15/27

TITLE: How to Stimulate Student Activity During Lessons (Ob aktivizatsii uchashchikhsya na uroke)

PERIODICAL: Fizika v Shkole, 1958, Nr 3, pp 57 - 58 (USSR)

ABSTRACT: The author gives some examples of how to awaken the interest of students and secure their active participation during lessons in physics.

ASSOCIATION: Srednyaya shkola selektsionno-opytnoy stantsii (The Secondary School of the Experimental Selection Center), Chelyabinskaya Oblast'.

AVAILABLE: Library of Congress

Card 1/1 1. Physics-Study and teaching 2. Teaching-Methods

FEDOTOV, I. D. (g. Chebarkul' Chelyabinskoy obl.)

Working with textbooks in physics classes. Fiz. v shkole 18 no.4: 40-42 Jl-Ag '58. (MIRA 11:7)
(Physics--Study and teaching)

FEDOTOV, I.P. (g.Moskva)

Demonstrations with a magnetometric device. Fiz. v shkole 20 no.3:72-75 My-Je '60. (MIRA 13:11)

(Magnetic measurements)

FEDOTOV, I.P.

Prospects of the expansion of strip mining in the Ekibastuz coal deposit. Ugol' 37 no.1:7-10 Ja '62. (MIRA 15:2)

1. Glavnyy inzh. tresta Irtyshugol'.
(Ekibastuz Basin--Strip mining)

FEDOTOV, I.P., kand. tekhn. nauk, dotsent; YAVORSKIY, B.M., prof.

Dielectric properties of metallized cloth. Tekst. prom. 23 no.12:65-68 D '63. (MIRA 17:1)

1. Kafedra fiziki Moskovskogo tekstil'nogo instituta (for Fedotov). 2. Zaveduyushchiy kafedroy fiziki Moskovskogo tekstil'nogo instituta (for Yavorskiy).

FEDOTOV, I. P., assistent; YAVORSKIY, B. M., prof.; PETROV, V. V.

Measuring the specific susceptibility of metalized fabrics.
Tekst. prom. 23 no.3:81-82 Mr '63. (MIRA 16:4)

1. Kafedra fiziki Moskovskogo tekstil'nogo instituta (MTI) (for Fedotov). 2. Zaveduyushchiy kafedroy fiziki Moskovskogo tekstil'nogo instituta (for Yavorskiy). Nachal'nik laboratorii fiziki Moskovskogo tekstil'nogo instituta (for Petrov).

(Metal cloth—Magnetic properties)

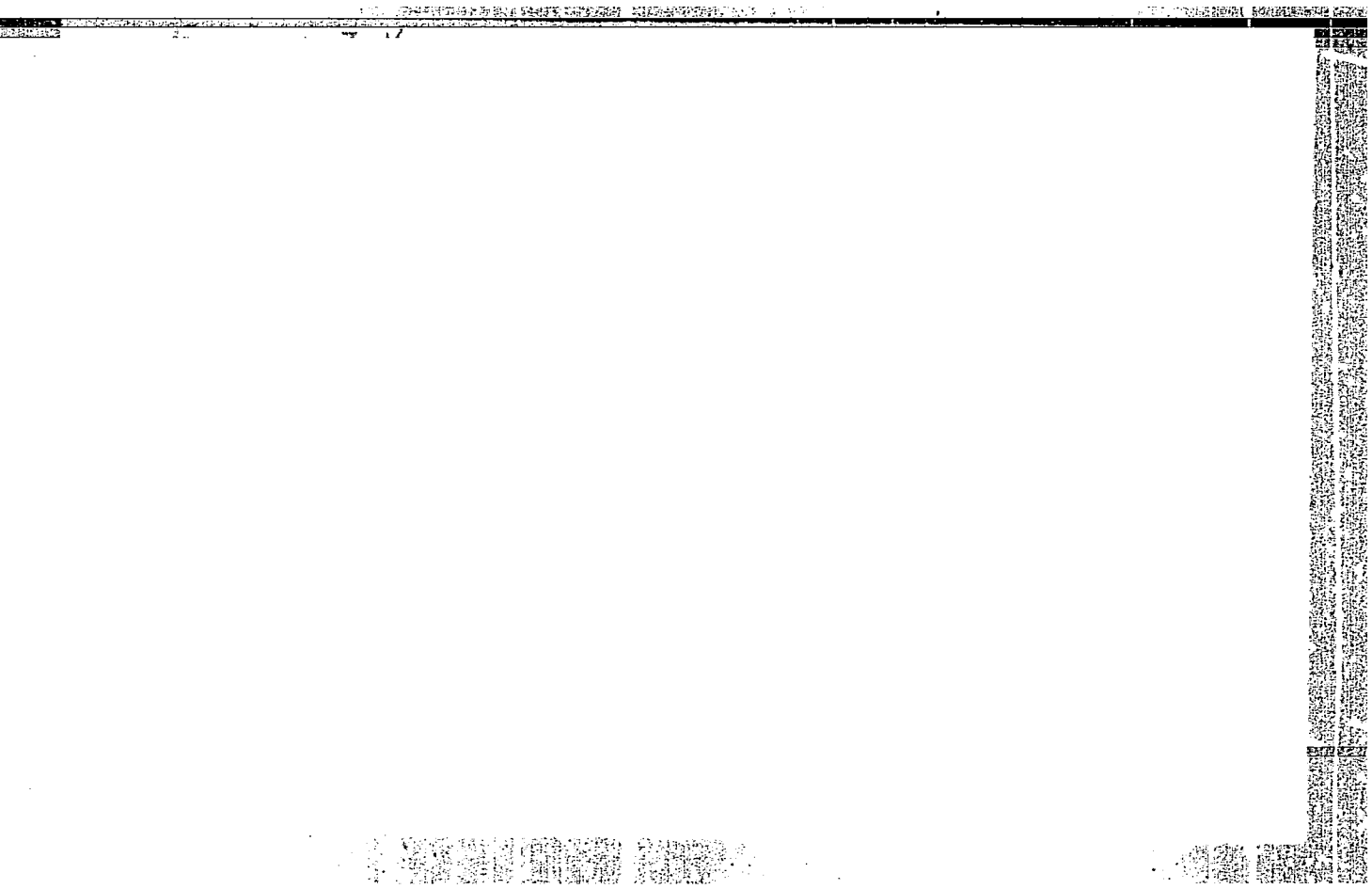
FEDOTOV, I.P.

Improve the strip mining of coal in Ekibastuz. Ugol' 38 no.8: 28-32 Ag '63. (MIRA 17:11)

1. Glavnyy inzh. tresta Irtyshugol'.

ALEKHIN, F.K.; ALOTIN, L.M.; ALTAYEV, Sh.A.; ANTONOV, P.Ye.; BEVZIK, Yu.Ya.; BELEN'KIY, D.M.; BRATCHENKO, B.F., gornyy inzh.; BRENNER, V.A.; BYR K[illegible]V.F.; VAL'SHTEYN, G.I.; YERMOLENOK, N.S.; ZHISLIN, I.M.; IVANOV, V.A.; IVANCHENKO, G.Ye.; KVON, S.S.; KODYK, G.T.; KREMENCHUTSKIY, N.F.; KURDYAYEV, B.S.; KUSHCHANOV, G.K.; MASTER, A.Z.; PREOBRAZHENSKAYA, Ye.I.; ROZENTAL', Yu.M.; RUDOY, I.L.; RUSHCHIN, A.A.; RYBAKOV, I.P.; SAGINOV, A.S.; SAMSONOV, M.T.; SERGAZIN, F.S.; SKLEPCHUK, V.M.; USTINOV, A.M.; UTTS, V.N.; FEDOTOV, I.P.; KHRAPKOV, G.Ye.; SHILENKOV, V.N.; SHNAYDMAN, M.I.; BOYKO, A.A., retsenzent; SUROVA, V.A., ved. red.

[Mining of coal deposits in Kazakhstan] Razrabotka ugol'nykh mestorozhdenii Kazakhstana. Moskva, Nedra, 1965. 292 p. (MIRA 18:5)



APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00041273(

REDUTOV I. M.

GRAIN REFINEMENT IN THE ARC WELDING OF HEAT-RESISTING 30% CHROMIUM STEEL. G.K. Tikhodeev and I. E. Sedetov. (Metallurg, 1940, No. 2, pp. 351-37). (In Russian). The welding experiments described by the authors were carried out on as-rolled strips 25 mm. in cross-section of heat-resisting steel of the following composition: Carbon 0,12%, manganese 0,67%, silicon 0,93%, chromium 28,0%, nickel 0,30%, phosphorus 0,029%, and sulphur 0,024%. The first welds were made using imported electrodes with a coating containing CaF$_2$, CaCO$_3$, ferro-manganese and water-glass. The tensile strength of the welds was ic. (30-40 kg. per sq. mm.) and they could practically not be bent at all without fracturing. The weld metal was coarse grained. Gas welding gave even worse results, as it caused considerable grain growth in the parent metal adjoining the weld. This effect was absent with arc welding. It was decided to obtain grain refinement in the weld metal by introducing titanium and aluminium from the electrode coating. After numerous trials the following composition was arrived at: Fluorspar 35%, marble 25%, ferro-titanium 20%, and 20% ferro-chromium 20% plus a water-glass binder. The metal used for the electrodes contained carbon

continued: 0.07%, manganese 0.26%, silicon 0.49%, chromium 34.4%, nickel 0.21%, sulphur 0.03% and phosphorus 0.005%. These electrodes produced a fine-grained weld metal, the tensile strength of the welds increasing 50-60% up to 58 kg. per sq. mm., i.e., up to the tensile strength of the parent metal. The ductility, however, remained low, which is a characteristic of this steel in the cast state. The ductility could be improved by quenching in water from 750° to 800°C. Analyses were made to determine the behaviour of the constituents of the coating during welding. The weld metal was found to contain 0.23% of titanium and 0.12% of aluminium. Both the weld metal and the adjoining parent metal were subjected to microscopic examinations and their structure-notably the presence of an intergranular carbide network in the weld metal-was related to their mechanical properties.

Immediate source clipping

Ye

AID P - 2917

Subject : USSR/Electricity

Card 1/1 Pub. 26 - 14/32

Authors : Bol'nik, M. L. and I. E. Fedotov, Engs.

Title : On the necessity of reviewing earth work production rates and wages

Periodical : Elek.sta., 7, 46, Jl 1955

Abstract : The authors discuss possibilities of increased production rates and simultaneous increases in wages for workers. A table gives data of two types of excavators.

Institution : None

Submitted : No date

25680 FEDOTOV, K. P.

Za vsemornuyu ekonomiyu donozhnykh srodstv.
Tekstil. Prom—st', 1948, No. 6, s. 4-5.

SO: Letopis' Zhurnal'nykh Statey, No. 30, Moskva, 1948

FEDOTOV, K.V.

Remote measurement of pressures in water pipes located in northern regions. Vod.i san.tekh. no.7:9-10 Jl '57. (MIRA 10:11)
(Water-supply engineering)

SIROTKIN, Vasiliy Pavlovich, prof., doktor tekhn.nauk; FEDOTOV, K.Y., red.; CHEKRYZHOV, V.A., red.izd-va; LELYUKHIN, A.A., tekhn. red.

[Layout and design of water pipes and water-pipe systems] Skhemy i raschet vodovodov i vodoprovodnykh setei. Moskva, Izd-vo M-va kommun.khoz.RSFSR, 1963. 246 p. (MIRA 16:10)
(Water pipes)

ROSTE, Z.A.; PELEVIN, L.A.; NUGAYEV, R.Ya.; FEDOTOV, K.V.

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